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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/763,092	02/16/2001	Iwao Miyajima	AKI-C052	2721

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EXAMINER

DEPUMPO, DANIEL G

ART UNIT PAPER NUMBER

3611

DATE MAILED: 05/10/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/763,092

Applicant(s)

Miyajima

Examiner

Daniel G. DePumpo

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Apr 9, 2002
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above, claim(s) 1-12 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 13-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s). 3 6) ☐ Other:

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1. Applicant's election with traverse of the invention of Group II, and the species of fig. 21 (claims 13-22 readable thereon) in Paper No. 6 is acknowledged. The traversal is on the ground(s) that the claims allegedly relate to a single inventive concept. This is not found persuasive because in view of the rejections below, the claims lack an inventive concept and, therefore, can not have a common inventive concept.

The requirement is still deemed proper and is therefore made FINAL.

2. Claims 1-12 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim.

3. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

It is noted that at page 3, line 19, "potions", and at page 10, line 11, "deteriorated" are incorrect.

Also, throughout the specification and claims, clarification is required as to whether the phrase "acrylonitrile-stylene" should actually be -- acrylonitrile-styrene --.

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 13-22 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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In claim 13, line 5, "at least" is vague and indefinite, and in line 8, "said raw" lacks antecedent basis.

In claim 15, line 4, "the end" lacks antecedent basis.

In claim 16, "the openings" lacks antecedent basis.

In claim 18 "at least" is vague and indefinite.

In claim 19, "may be" is vague and indefinite.

Claim 20 is indefinite because it is unclear whether the "beads" comprise one of, all of, or a combination of, the numerous polymers recited.

Also, throughout the claims, clarification is required as to whether the phrase "acrylonitrile-styrene" should actually be --acrylonitrile-styrene--.

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 18 and 19 are rejected under 35 U.S.C. 102(b) as being anticipated by the Japan 106,390 reference (JP '390).

JP '390 discloses a swing arm 10 having a portion filled with a vibration suppressing material such as gum, sponge or the like (abstract translation). Gum and/or sponge are considered to comprise a foam resin to the same degree as claimed. The method is inherent in the making of the JP '390 device.

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8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) a patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 13-15, 18 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamagiwa et al. '677 in view of JP '390.

Yamagiwa discloses a two-wheeled motor vehicle wherein a hollow portion of the frame is filled with an acoustic material or a damping material (col.6, line 26) such as polyurethane foam (col. 6, line 53). The foam may be introduced at a threaded opening (col. 6, lines 32 and 63).

Yamagiwa does not specifically disclose that the foam is introduced into the swing arm section of the vehicle frame. However, JP '390, teaches a swing arm which is filled with a vibration suppressing material such as gum, sponge or the like (abstract translation). It would have been obvious to modify Yamagiwa by including the foam in the swing arm section of the frame since both Yamagiwa and JP '390 teach the desirability of adding a damping material or vibration suppressing material in a hollow section of a motorcycle frame, and JP '390 specifically teaches the inclusion of such a material in a swing arm to suppress vibrations.

Yamagiwa discloses that the foam may be introduced at a threaded opening (col. 6, lines 32 and 63), but does not specifically disclose that the threaded opening is the opening by which the swing arm is mounted to the vehicle (claim 14). However, since Yamagiwa discloses

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the introduction of the foam through a threaded opening, to select the mounting opening would have been an obvious design expedient. Yamagiwa also discloses that the use of random holes to fill the frame (col. 20, lines 55-60) is convenient. Thus, it would have been an obvious design expedient to introduce the foam through an opening at the end of the arm portion (claim 15).

Yamagiwa teaches that the foam is foamed after it is poured into the frame, and does not teach that the foam material is previously molded (claim 18). However, JP '390 discloses the use of a foam material which is previously molded, as depicted in fig. 1. It would have been obvious to use a previously molded foam, as taught by JP '390. To avoid the step of foaming the material after it is introduced into the frame.

10. Claims 16, 17 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Yamagiwa and JP '390 as applied to claims 13-15, 18 and 19 above, and further in view of the Japan 205119 reference (JP '119).

As set forth above, the combination teaches substantially all that is claimed, but does not teach the use of a mesh sheet (claim 16), and does not specifically disclose the use of acrylonitrile styrene (claim 20). JP '119, however, discloses a filling method of a foaming body including the use of a "net type bag body 16" (abstract translation) to retain the "styrene acrylonitrile" (abstract translation) foam as shown in fig. 1. It would have been obvious to use a mesh sheet, or "net type bag body" as taught by JP '119, to retain the material before it is foamed. It would have also been obvious to use styrene acrylonitrile since this is an extremely common and well known structural foam, and since JP '119 teaches that its use is desirable.


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11. Claims 21 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Yamagiwa and JP '390 as applied to claims 13-15, 18 and 19 above, and further in view of Luetkens, Jr. et al.

It is unclear whether the polyurethane foam disclosed by Yamagiwa comprises a combination of the numerous polymers recited in claims 21 and 22. However, Luetkens discloses a foam comprised of combinations of the claimed polymers (col. 9, lines 5-16). It would have been obvious to modify the combination by using combinations of the claimed polymers to obtain the useful properties as disclosed by Luetkens at least at col. 9, lines 12-16.

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Emmelmann, Cislik, Wycech '562, Miller, Yamane, Takabatake and Wycech disclose the common use of a polymer foam, in a vehicle frame member, for acoustical and strength purposes.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel G. DePumpo whose telephone number is (703) 308-1113.



DANIEL G. DePUMPO
PRIMARY EXAMINER

dgd

May 8, 2002